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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,264	04/23/2001	Toshiharu Saito	Meic:047A	2896

7590

07/09/2003

PARKHURST & WENDEL, L.L.P.
Suite 210
1421 Prince Street
Alexandria, VA 22314-2805

EXAMINER

NGUYEN, TAI V

ART UNIT PAPER NUMBER

3729

DATE MAILED: 07/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/839,264

Applicant(s)

SAITO ET AL.

Examiner

Tai V Nguyen

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-47 is/are pending in the application.
- 4a) Of the above claim(s) 37-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/295,328.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
2. The title is suggested: A METHOD OF MANUFACTURING LAMINATED CAPACITORS.
3. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.**

Extensive mechanical and design details of apparatus should not be given.

4. The abstract of the disclosure is objected to because the abstract is not drawn to the claimed invention, i. e. method. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

Abstract.

5. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 41-47 are rejected under U.S.C. 112 second paragraph, as being indefinite for failing to particular point out and distinctly claims the subject matter which applicants regard as their invention.

In claim 41, the recitation of "forming one of" (line 3) is unclear as to what is subsequently being referred to, such as one of the compositions of dielectrics of "dielectrics ... said conductor" (lines 4-6), or one of the steps (recited at 7-11) in their entirety.

The phrase "said conductor" (line 6) lacks positive antecedent basis.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 41, 42, 44-46 as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Harakawa et al (US 4,805,074).

As applied to claim 41, Harakawa et al discloses a method of manufacturing laminated capacitors, the method comprising the steps of forming one of: dielectrics made of organic high polymer, dielectrics made of organic high polymer (8, Fig. 3) and composite dielectrics made of organic high polymer and oxide of a metal constituting the conductor; forming an insulating layer (64, Fig 28) at least on the conductor (in Fig. 28); forming an opposite electrode (10) on the dielectrics to complete a capacitor element; laminating a plurality of the capacitor elements (see Fig. 28); and forming an external connection terminal (61, Fig. 28).

As applied to claim 42, Harakawa discloses the dielectric is formed by electro-depositing organic high polymer (column 9, lines 65+).

As applied to claim 43, Kudoh et al discloses the compound dielectrics is formed by simultaneous progression of electro deposition of organic high polymer (column 9., lines 65+); and anodization of a metal constituting the conductor (2, Fig. 1).

As applied to claim 44, Harakawa discloses the chemical oxy-polymerization; and both chemical oxy-polymerization and electro-polymerization (see column 9, lines 65-68 and column. 10, lines 1-28).

As applied to claims 45-46, Harakawa et al the opposite electrodes of the adjacent capacitor elements are bonded using conductive adhesive (graphite layer 9) in the step of laminating a plurality of the capacitor elements.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 43 as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Harakawa et al in view of Kudoh et al (US 5,140,502).

As applied to claim 43, Harakawa et al as relied upon above discloses all limitations of the claimed method except anodization of a metal constituting the conductor.

However, Kudoh et al teach the step of anodization of a metal constituting conductor (see column 6, lines 12-21) for the purpose of providing less degrading of the interaction between the inorganic conductive layer and the dielectric film.

It would have been obvious to one of ordinary skill in the art at this time the invention was made to modify Harakawa et al by including the step of anodization, as taught by Kudoh et al, to positively provide less degrading.

11. Claim 47 as best understood, is rejected under 35 U.S.C. as being unpatentable over Harakawa in view of Higgins, III (US 5,212,402).

Harakawa, discloses the method substantially as claimed above. However, the Harakawa et al method does not disclose that the organic polymer is a polyimide. Higgins, III discloses that a organic polymer can be a polyimide (column 3, lines 55-57) for the purpose bonding the two lead-frames together.

It would have been obvious to one of ordinary skill in the art at this time the invention was made to have modified the Harakawa et al method by utilizing the material of the organic polymer as a polyimide as taught by Higgins, III, to improve adhesion between the polymer and conductive leads.


Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai V Nguyen whose telephone number is (703) 308-1791. The examiner can normally be reached on M-F (7:30-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vo Peter can be reached on (703) 308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7307 for regular communications and (703) 305-3579 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.


A. DEXTER TUGBANG
PRIMARY EXAMINER
6/25/03